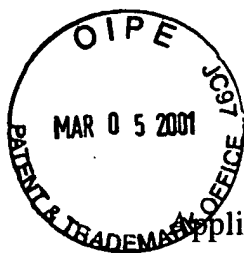
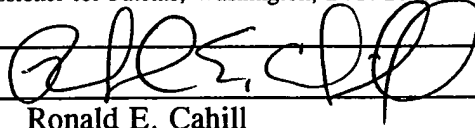


GAU 1647  
#6



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Scott Saunders et al  
Application No. : 09/723,677      Group Art Unit: 1647  
Confirmation No: Unassigned  
Filed : November 28, 2000      Examiner: Unassigned  
Entitled : CONSTRUCTION AND USE OF  
SYNTHETIC CONSTRUCTS  
ENCODING SYNDECAN  
Docket No. : 101353-151

Certificate of Mailing (37 C.F.R. 1.8(a))	
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February 28, 2001	By: 
Date of Signature and Mail Deposit	Ronald E. Cahill Reg. No: 38,403

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, DC 20231

Dear Sir:

Applicants hereby cite for the record in this application the enclosed documents listed on the attached copy of PTO Form 1449. The enclosed Information Disclosure Statement is being filed prior to the mailing date of a first Office Action on the merits. Accordingly, Applicant believes that no fee or certification is required.

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Application No.: 09/723,677

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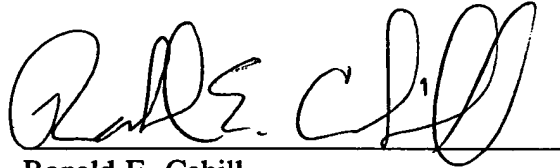
Group Art Unit: 1647

Examiner: Unassigned

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 141449. This form is submitted in triplicate.

Respectfully submitted,

NUTTER, MCCLENNEN & FISH, LLP



Date: February 28, 2001

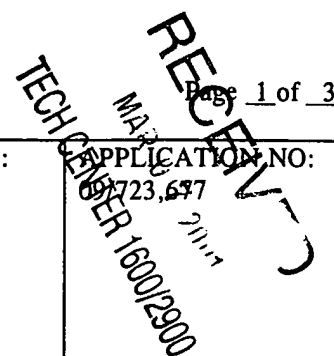
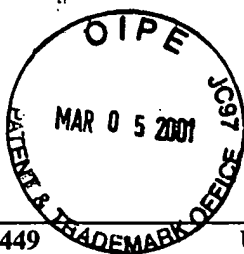
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Form PTO-1449 (Rev. 8-83)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO: 101353-151
INFORMATION DISCLOSURE CITATION  <i>(Use several sheets if necessary)</i>		APPLICATION NO: 08723,677

	APPLICANT: Scott Saunders et al	
	FILING DATE: November 28, 2000	GROUP ART UNIT:

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE*
32	AA	4 3 3 6 3 3 6	06/22/82	Silhvay et al	435	172	
32	AB	4 8 4 0 9 4 1	06/20/89	Ueno et al	514	59	
32	AC	4 9 5 6 3 4 7	09/11/90	Ban et al	514	54	

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES      NO
32	BA WO 90/07712	12.07.90	PCT			X
32	BB WO 90/12033	18.10.90	PCT			X
32	BC WO 93/05167	18.03.93	PCT			X

**OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, Etc.)**

32	CA	Ayotte, L., et al., "N.M.R. Spectroscopic Observations Related to the Function of Sulfate Groups in Heparin. Calcium Binding vs. Biological Activity" (1986) <i>Carbohydrate Res.</i> Vol 145 :267-277
32	CB	Bernfield, M., et al., "Biology of the Syndecans: A Family of Transmembrane Heparan Sulfate Proteoglycans" (1992) <i>Annu. Rev. Cell Biol.</i> , Vol. 8:365-393
32	CC	Bernfield, M., et al., "Syndecan, a Developmentally Regulated Cell Surface Proteoglycan That Binds Extracellular Matrix and Growth Factors" (1990) <i>Phil. Trans. R. Soc. Lond.</i> , Vol B327:171-186
32	CD	Bourdon, M.A., "Structure and Role of Cloned Small Proteoglycans" (1990) <i>Extracellular. Matrix Genes</i> , Academic Press, Inc., 157-174
32	CE	Carey, D.J., et al., "Molecular Cloning and Characterization of N-Syndecan, a Novel Transmembrane Heparan Sulfate Proteoglycan" (1992) <i>J. Cell Bio.</i> , Vol. 117, No. 1:191-201.
32	CF	Cizmeci-Smith, G., et al., "Regular Expression of Syndecan in Vascular Smooth Muscle Cells and Cloning of Rat Syndecan Core Protein cDNA" (1992) <i>J. Biolog. Chem.</i> , Vol. 267, No. 22:15729-15736

32	CG	David, g., et al., "Molecular Cloning of Amphiglycan, a Novel Integral Membrane Heparan Sulfate Proteoglycan Expressed by Epithelial and Fibroblastic Cells" (August, 1992) <i>J. Cell Bio.</i> , Vol. 118, No. 4:961-969
32	CH	Fransson, L., et al., "o-L-Iduronate Ring Conformations in Heparin and Heparin Derivatives" (1978) <i>Biochem. J.</i> , Vol. 175:299-309
32	CI	Fransson, L., "Periodate Oxidation of the D-Glucuronic Acid Residues in Heparan Sulphate and Heparin" (1978) <i>Carb. Res.</i> , Vol. 62:235-244
32	CJ	Gamse, G., et al., "Metabolism of Sulfated Glycosaminoglycans in Cultured Endothelial Cells and Smooth Muscle Cells From Bovine Aorta" (1978) <i>Biochimica et Biophysica Acta</i> , Vol. 544:514-528
32	CK	Gould, S., et al., "Syndecan 3: A Member of the Syndecan Family of Membrane-Intercalated Proteoglycans that is Expressed in High Amounts at the Onset of Chicken Limb Cartilage Differentiation" (1992) <i>PNAS</i> , Vol. 89:3271-3275
32	CL	Hardingham, T., et al., "Proteoglycans: Many Forms and Many Functions" (February, 1992) <i>FASEB J.</i> , Vol. 6:861-870
32	CM	Ishihara, M., et al., "A Cell-Based Assay for Evaluating the Interaction of Heparin-like Molecules and Basic Fibroblast Growth Factor" (1992) <i>Anal. Biochem.</i> , Vol. 202:310-315
32	CN	Jalkanen, M., et al., "Cell Surface Proteoglycan of Mouse Mammary Epithelial Cells is Shed by Cleavage of Its Matrix-binding Ectodomain from Its Membrane-associated Domain" (December, 1987) <i>J. Cell Bio.</i> , Vol. 105, No. 6:PT 2:3087-3096
32	CO	Jalkanen, M., et al., "Mouse Mammary Epithelial Cells Produce Basement Membrane and Cell Surface Heparan Sulfate Proteoglycans Containing Distinct Core Proteins" (March, 1988) <i>J. Cell Bio.</i> , Vol. 106:953-962
32	CP	Kato, M., et al., "Polymorphism of Syndecan: A Distinctive Form on Mesenchymal Cells" (1989) <i>Abstract: J. Cell Biol.</i> , Vol. 190, No. 3209: Abstract #1757
32	CQ	Kiefer, M., et al., "Ligand-affinity Cloning and Structure of a Cell Surface Heparan Sulfate Proteoglycan that Binds Basic Fibroblast Growth Factor" (September, 1990) <i>PNAS</i> , Vol. 87:6985-6989
32	CR	Kim, C.W., et al., "Members of the Syndecan Family of Heparan Sulfate Proteoglycans are Expressed in Distinct Cell-, Tissue-, and Development-Specific Patterns" (July, 1994) <i>Mol. Biol. Cell</i> , Vol. 5, No. 7: 797-805
32	CS	Koda, J., et al., "Heparan Sulfate Proteoglycans from Mouse Mammary Epithelial Cells" (1985) <i>J. Bio. Chem.</i> , Vol. 260, No. 13:8157-8162
32	CT	Kojima, T., et al., "Molecular Cloning and Expression of Two Distinct cDNA-encoding Heparan Sulfate Proteoglycan Core Proteins from a Rat Endothelial Cell Line" (1992) <i>J. Biol. Chem.</i> , Vol. 267, No. 7: 4870-4877
32	CU	Kokenyesi, R. et al., "Core Protein Structure and Sequence Determine the Site and Presence of Heparan Sulfate and Chondroitin Sulfate on Syndecan-1" (1994) <i>J. Biol. Chem.</i> , Vol. 269, No. 16: 12304-12309
32	CV	Linhardt, R., J., et al., "Examination of the Substrate Specificity of Heparin and Heparan Sulfate Lyases" (1990) <i>Biochem.</i> , Vol. 29:2611-2617
32	CW	Lories, V., et al., "Differential Expression of Cell Sulfate Proteoglycans from Human Vascular Endothelial Cells and Lung Fibroblasts" (1992) <i>J. Biolog. Chem.</i> , Vol. 267, No. 2:1116-1122
32	CX	Mali, M., et al., "Sequence of Human Syndecan Indicates a Novel Gene Family of Integral Membrane Proteoglycans" (1990) <i>J. Biolog. Chem.</i> , Vol. 265, No. 12:6884-6889
32	CY	Mertens, G., et al., "Cell Surface Heparan Sulfate Proteoglycans from Human Vascular Endothelial Cells" (1992) <i>J. Biolog. Chem.</i> , Vol. 267, No. 28:20435-20443
32	CZ	Olwin, B., et al., "Repression of Myogenic Differentiation by aFGF, bFGF, and K-FGF Is Dependent on Cellular Heparan Sulfate" (August, 1992) <i>J. Cell Bio.</i> , Vol. 118, No. 3:631-639

32	DA	Pierce, A., et al., "Molecular Cloning of the Major Cell Surface Heparan Sulfate Proteoglycan from Rat Liver" (1992) <i>J. Biolog. Chem.</i> , Vol. 267, No. 6:3894-3900
32	DB	Rapraeger, A., et al., "Cell Surface Proteoglycan of Mammary Epithelial Cells" (1985) <i>J. Biolog. Chem.</i> , Vol. 260, No. 7:4103-4109
32	DC	Ross, C., et al., "Purification of a Basic Fibroblast Growth Factor-Binding Proteoglycan from Bovine Cardiac Plasma Membrane" (1993) <i>Biochimica et Biophysica Acta</i> , Vol. 1145:219-226
32	DD	Salmivirta, M., et al., "Basic Fibroblast Growth Factor-Syndecan Complex at Cell Surface or Immobilized to Matrix Promotes Cell Growth" (1992) <i>J. Biolog. Chem.</i> , Vol. 267, No. 25:17606-17610
32	DE	Sanderson, R., et al., "Molecular Polymorphism of a Cell Surface Proteoglycan: Distinct Structures on Simple and Stratified Epithelia" (December, 1988) <i>PNAS</i> , Vol. 85:9562-9566
32	DF	Sanderson, R., et al., "Syndecan-1, a Cell-Surface Proteoglycan, Changes in Size and Abundance when Keratinocytes Stratify" (1992) <i>J. Invest. Dermatol.</i> , Vol. 99, No. 4:390-396
32	DG	Saunders, S., et al., "Cell-Surface Proteoglycan Binds Mouse Mammary Epithelial Cells to Fibronectin and Behaves as a Receptor for Interstitia Matrix" (February, 1988) <i>J. Cell Bio.</i> , Vol. 106:423-430
32	DH	Saunders, S., et al., "Molecular Cloning of Syndecan, an Integral Membrane Proteoglycan" (April, 1989) <i>J. Cell. Bio.</i> , Vol 108; 1547-1556
Examiner		Date Considered: <i>James Lee 7-25-2002</i>
		*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and considered. Include copy of this form with next communication to applicant.

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**Notic of References Cited**

Application/Control No.

09/723,677

Applicant(s)/Patent Under  
Reexamination  
SAUNDERS ET AL.

Examiner

Zachariah Lucas

Art Unit

1648

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
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	J	US-			
	K	US-			
	L	US-			
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**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Bowie et al., "Decifering the Message inProtein Sequences: olerance to Amino Acid Substitution," Science, Vol. 247, pp. 1306-1310 (1990).
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.